

Of Money, Heresy, and Surrender, Part II: A Plea for a Regional and Perishable Currency

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Abstract

A fundamental, but neglected truth of the nature of money resides in its *imperishable* character. The advertence to this peculiar physical property of the money metals, which have traditionally been employed as the chief means of payment before being transmuted into the virtual form of contemporary bank money, has seldom been made in the vast literature dealing with the subject. It stands as one of the great merits of the German anarchist current of thought of the early twentieth century (Silvio Gesell and Rudolf Steiner in particular) to have acknowledged the extraordinarily unfair advantage wielded by “money” vis-à-vis the rest of the economy, and sought thereby to remedy this aboriginal distortion via the introduction of a genial device: a time-sensitive money certificate. This article explores the institutional and theoretical issues that have led to this innovation, and concludes with a brief survey of the record achieved thus far by the late attempts of introducing in several parts of the world regional currencies in substitution of proprietary bank money—i.e., money as we know it.

Introduction

Sagredo: And can we think of a greater inanity than that which treasures things such as gems, silver, and gold, and vilifies, on the other hand, dirt and the earth? [...] I believe that those extravagantly bent on extolling imperishability, inalterability and the like are prompted to utter these things by the anxious wish to live long and by the terror of death. They forget to reckon that if men were immortal, it wouldn't be their lot to be come into this world.*

Galileo, *Dialogo sopra ai massimi due sistemi*

A necessary condition, though possibly not a sufficient one, for the improvement of collective life is that the money of the world communities ought, like the goods and performances it is assigned to mirror, have an expiration date. In other words, *money must die*. The economic root of all social and economic evil does not so much reside in Man's avid obsessions, but rather in the transformation of the means of payment –a mere intangible sign–into a tradable good, which is managed by an establishment of private owners –the oligopolistic banking cartel–within the virtual boundaries of a *proprietary network*. The wills and appetites of the network's custodians perforce direct, shape and inform the activities of the world at large, for every economic endeavor begins indeed with the issuance of *money*. The first distortion wrought upon money was thus to have assimilated it to a commodity; a commodity,–gold above all, in fact– *which possesses the formidable, and perfectly un-economic property of never perishing*.

Proponents of a dying currency were granted a nook of the social forum during the nineteen twenties in Germany. Silvio Gesell (1862-1930)–an ex-businessman of dental tools catapulted by anarchist demand to the post of Finance Minister in a five-day Soviet experiment in Munich (1919)–, and Rudolf Steiner (1861-1925)–the Austrian mystic that did not leave a single stone of the physical and praeternatural realms unturned, are the two isolated prophets of perishable money. They roused some passion in their time, but after the fire of the Depression and its bellicose resolution (WWII), their reflections on the nature of money were shoved from the discursive periphery to the warehouse of irrelevance.

* E qual maggior sciocchezza si può immaginar di quella che chiama cose preziose le gemme, l'argento e l'oro, e vilissime la terra e il fango? [...]. Questi che esaltano tanto l'incorruttibilità, l'inalterabilità, etc., credo che si riduchino a dir queste cose per il desiderio grande di campare assai e per il terrore che hanno della morte; e non considerano che quando gli uomini fossero immortali, a loro non toccava a venire al mondo.

These last years, however, it appears that movements advocating regional currencies and groups of committed dissidents seeking to bring decisions where they belong—in the community’s fold—are astir: at the grassroots, perishable money has been rediscovered; more and more individuals are striving to bypass the oligarchic network, by establishing alternative grids of economic exchange. Within such weaves of relations, a periodical charge imposed on money balances—i.e., *the imposition of a negative rate of interest*—would act as the natural stimulant to circulation and trade, as well as the most conspicuous impediment to pecuniary hoarding, which is the curse of economic life.

This essay is divided into three sections. The first (*On Money*) introduces the money question initially by relating the life and exploits of the economic doyen of German anarchism, Silvio Gesell. Gesell’s crucial, yet still poorly known reformist endeavor, is complemented—in the second section (*Heresy*)—by the fascinating intuitions of Rudolf Steiner, who had reached, at about the same time, conclusions virtually identical to those of Gesell himself. There follows a review of the several alternative systems of exchange based on and inspired by this anarchistic tradition of regional self-help, which have been recently launched (for the most part in Germany) to overcome economic hardships and/or to stimulate communal entrepreneurship. The third and conclusive section (*and Surrender*) addresses the state of public knowledge in monetary matters by focusing on the tangle of official “theories” and opinions that presently account for the utter confusion reigning over this subject. Indeed, it will be seen that the most critical aspects of contemporary monetary policy bear a tight and intriguing connection to the very theoretical subtleties developed by the anarchist tradition three generations ago.

Of Money...

Anarchist Guru

The case of Silvio Gesell is somewhat extraordinary.

In his youth, he had been one of those adventurous merchants, which Germany produced in profusion during the illusory and heady days of the Wilhelmine belle époque. He had made good money selling German tools in Argentina, and he eventually retired to Switzerland in 1900 to enjoy the fruits of his commercial labors as a gentleman-farmer. In his retreat, he found time to elaborate particular ideas for economic reform that had been taking shape in his mind over the course of his commercial experience. Indeed, he had learned economics the hard way; he had seen in function the engine of business enterprise from the inside. Doubtless, he reasoned, the capitalist machine... *worked*. No less doubtful, however, was the fact that such a machine, humanly speaking, “worked” exploitatively, and that it periodically sputtered into malfunction, before collapsing altogether with cyclical punctuality, inflicting thereby all manner of pain across the social spectrum. Gesell claimed that he knew with precision which aspect of the engine’s design was flawed and ultimately responsible for all such economic anguish. And it had to do almost exclusively with the very special institutional arrangement of our *monetary* apparatus. Injustice, in other words, was for Gesell rooted first and foremost in the institution of money itself, rather than, say, in the common practices and contractual laws ruling labor dynamics (wage bargaining, union-action etc.). Indeed, from Gesell’s perspective, the problematics of labor, unemployment and depression are to be construed as important social *consequences* of the primary institutional error upon which our traditional monetary system has been edified.

Good anarchist that he intimately was, Gesell shunned from the outset the eventuality (or expediency) of hitching his urge for radical reform to the political locomotive of Marxist socialism. When it came to monetary matters, Marxism, in fact, was no less conservative and authoritarian than its Liberal counterpart—truly the advocates of both camps saw things exactly alike: money *is* gold and vice versa, and it is ultimately to be entrusted to the offices of a central bank.¹ To Gesell, Marx and his followers were missing and misunderstanding the point entirely. Gesell aspired to a *practical*,² non-Statalist technical correction of the system’s monetary engineering, one whose implementation would have gradually effected the transition to a form of communitarian socialism resting upon free, private initiative—in brief, the classic anarchistic economic ideal-type.

Once retired, Gesell committed his ideas to paper; they circulated in the form of numerous pamphlets, which he initially sent to academics, politicians and

professionals, without, at first, eliciting any kind of response. A systematic and organized expression of his intuitions eventually appeared in book format in 1916 under the title *Die Natürliche Wirtschaftsordnung* (The Natural Economic Order, NIO hereafter). Revised in 1919, the new edition of the NIO became the platform of Gesellian economics, his masterpiece and definitive formulation of the monetary question.³ Unbeknownst to many anarchists, sadly, this is one of anarchism's sacred texts.⁴

By the end of the Great War, however, Gesell had managed to attract a following—one sufficiently diffuse and feisty as to find itself in an extraordinary position of leadership during that craziest, and least known of historical interludes: the season of the German Soviets (the *Räte-Regierungen*, November 1918-June 1919).⁵ In the course of what came to be called the “Conciliar movement” –a semi-spontaneous, communitarian uprising, which burgeoned in hundreds of German cities and boroughs in the aftermath of defeat (in WWI) and of the temporary power vacuum in Berlin—panels of improvised legislators drawn from a motley array of artists, military men and professionals seized the communal helm all over Germany. Munich, in particular, experienced three such Soviets: 1) an initial constituency headed by the obvious alternative of the Socialists gave way eventually to 2) a campy administration of playwrights and free-wheeling anarchists (from April 8 to April 13, 1919), who were finally ousted in turn by 3) Communist militias. Commandos of White guards led by war veterans themselves directed by the newly reconstituted authority in the German capital would drown all such seditious experience in blood in the spring of 1919. It was also on such ashes that Weimar was shakily erected.

During Munich's second Soviet, Gesell was summoned and sworn in as Finance Minister by his friend, Culture Minister Gustav Landauer, the anarchist luminary and exegete of Shakespeare, who was then drafting legislation mandating for all pupils the memorization by the age of ten of Walt Whitman's poetry. It took Gesell and his associates no time to produce what they saw as the grail of economic prosperity: a chest bulging with reams of quaint certificates, each bearing on its back a quainter grid—a square-pattern, made of tiny little boxes upon which one was to affix periodically a purple stamp. Thus “*taxed*”, Gesell reasoned, money 1) would reflect the depreciation to which all staples are subjected; 2) it would be prevented from being hoarded; and 3) it would steer the path of economic expansion onto a plane denoted by the absence of inflation, crises and usury. This would be revolution.

Could such a simple scheme truly do all this? And if so, why, and how?

In those distant Bavarian days, this most ambitious project never saw the light of day; before the strange bills could be put into circulation, Communist forces loyal to Berlin's Marxist directorate, drove out Landauer & Co and pulled the plug on the carnival of the anarchists. Gesell died in 1930—another prophet unheeded, his spirit hallowed ever since by a minority streak within the drying stream of anarchism. In the following biennium, two experiments inspired by his example, as we shall relate

below, were attempted with success in Austria and Bavaria. They were eventually truncated by the years of rearmament (1935-39). Afterwards came war (1939-45), Bretton Woods (1944-71), Stagflation (1974-78), Neoliberalism (1979-1987), and finally the New Economy (1990-present). Interestingly, it is during this last period that Gesellian schemes have been revived: one may wonder whether they've also reappeared as harbingers and symptoms of profound crisis, like their antecedents in the thirties. Today, from small beginnings—mostly in Germany—these communal initiatives appear to have developed a little life of their own.

So what was the theory behind Gesell's funny paper? What was the intuition, and the deeper meaning of such an artifice as Gesellian "stamp scrip" for the economy as whole?

Gesell's Theory of Interest

Gesell set the stage for his proposal by calling the reader's attention to a fundamental mismatch. On one side of the economic playing field, Gesell argued, there is conventional merchandise (goods of all sorts, from lettuce, to bricks), on the other, there is money— *gold*, to be precise. The basic intuition is the following: merchandise cannot afford to wait—for it goes bad, but gold can, for it is *imperishable*. Stated differently, there exists a fundamental imbalance on the plane of exchange between two qualitatively different kinds of *commodities*: namely, between regular staples and gold, which—and this is the crucial insight—has been mistakenly enshrined as the conventional means of payment from time immemorial. Why this has been so is known: the more the communities of men have been disjointed by war, intrigue, suspicion and cultural diffidence, the more they have tended to rely on a (gold-) monetary standard that 1) would be accepted by each self-guarded economic bloc in times of trading truce, and 2) would "congeal" wealth, as it were (the conventional misnomer for this notion is "savings") in the structure of a noble metal's imperishable substance. In other words, when trust breaks down and conflict looms, one goes a-burying gold in the backyard—a checkbook, or a mere claim, offers no tangible, fall-back "security".

Yet, in principle, we know it: in its purest and most fluid guise, money is a token, a *symbolic* expression –a notion devoid of physical substance. Presently the problem is that, even though gold has disappeared from the public's purview, we trade and transact in the world market with a means of payment, which we look upon as if it were still endowed with the physical property of noble metals. And the power of banking rests precisely on the crystallization of such misperception.

Socially, therefore, from the Gesellian angle, the tension is not between capitalist and wage-earner, but between producer and banker—a fundamental distinction to bear in mind.

Therefore, an embarrassment ensues: the producer, who is *demanding money* from the banking system for his business, *has to yield*, or else his goods will rot. *And it is in such an imbalance*, Gesell sentenced, *that lies the seed of usury*: i.e., the charging of *interest*. Interest, Gesell tells us, never is the legitimate recompense of thrift, or a natural price that is due to some nondescript “saver,” as maintained by the scholiasts of the Liberal school. In truth, what any saver ultimately possesses is a batch of goods that await consumption in a warehouse –the money corresponding to these goods is a collection of mere tokens that are supposed to facilitate the transfer of the goods from their owner to entrepreneurs that will actually “build” something *durable* with them. This is what we denote as *investment*. Investment, Gesell insisted, is nothing but deferred consumption of longer-lived commodities. We shall return to this in the following section.

Interest, however, is something altogether different: it is a plus, a *fee*, a tribute which the producer pays to the banker in order to achieve a twofold objective: 1) to obtain for his business *imperishable* cash, which was issued as the bankers’ paper-money against a hoard of gold, and 2) to gain access to a ramified proprietary (banking) grid, along which computer-money travels nowadays, enabling thereby swift, efficient payment across the world.

How money is injected into circulation, we all know: banks *mortgage* future earnings and possessions (a person’s, a firm’s, etc.), and upon such collateral they issue a *loan*, the repayment of which is at the heart of every single macroeconomic chronicle of our race’s history. So, in the beginning there is gold. Gold engenders interest as well as a payments network. Interest is exacted from loans, by means of which money reaches the population. The elementary difficulty arising out of this basic arrangement is that, *in the aggregate*, the population, by definition, can never repay the loan plus the interest. So the original loans need to be continually re-scheduled, at the cost of snowballing interest dues, to keep the economy in motion.⁶

Theoretically, we now have an *anchor* in the system: what Gesell calls *Urzins* (basic interest). This is the fundamental variable –the initial condition— upon whose dynamics the performance of the economy will hinge. In brief, Gesell’s Theory of Interest simply holds that businesses are initially charged basic interest –a somewhat invariable usurious hard core, which is imposed irrespective of any other surrounding economic conditions. Thereafter, businesses will market, arrange and/or curtail output in view of generating sales that will cover interest (i.e., overhead) plus whatever entrepreneurial profit they may squeeze out of the market. Thus, what we call the “rate of return” or the “interest upon capital” of a business is at all times dictated and driven by the money rates set by the banking sector: intuitively, if central banks decide for whatever reason to raise their rate, and consequently commercial banks react by increasing the prime rate, businesses struggle accordingly to match the higher price of money by attempting to garner higher profits. Such

pecuniary dearth will perforce hurt the weaker segments of the economy, which will immediately begin to shed jobs.

Gesell treated *Urzins* as some sort of exogenous variable. He averred that this hard core of usury (that is, interest, shorn of insurance premiums and adjustments for inflation) has oscillated in the last two millennia around an average of 4-5%. The artistry of banking consists precisely in setting the tone for a scale of interest rates in conjunction with the economy's overall rate of profitability and the reflux of taxation. In other terms, central bankers must guess a narrow range of values for their rate of interest (the tribute imposed for the privileged access to the network), such that businesses would not be burdened by these banking charges to a point at which they will have to cease operations, and such that the citizens' wages would be capable of affording familial sustenance as well as the undisturbed remittance of interest by way of 1) taxation (to honor the public debt), and 2) private transfers to credit card companies (i.e., private debt). Metaphorically speaking, (central) banking is not unlike the subtle practice of bleeding the body economic without sucking it dry.

The bloodletting (deprivation of leisure, recreation, and pursuit of the arts and sciences) thus foisted on the working many is also a more or less unintentional debilitation of their soul faculties: it is no wonder, as Thorstein Veblen –another magisterial, yet unheeded voice of anarchism— clearly understood, that conservatism is exhibited in a high degree amongst the laboring classes.⁷

Thus “interest” yielded by (conventional) imperishable money is the origin, the initial spark, of a *generalized rent-creating* process: as the banker controls the supply of money (gold is the scarce commodity *par excellence*) and, for its usage, demands a toll from his customers, so is every single borrower (i.e. every indebted business) compelled to recreate vis-à-vis the consuming public the conditions between itself and the money-lender (the bank). Therefore, producers will go to unimaginable extremes to shield their products with engineered scarcity, trademarks, monopolies, patents, copyrights, and proprietary arrangements of ever increasing intricacy –that is, they will seek to *extract rents* from the consumption and use of their ideas, insofar as they themselves have to pay money-rents (interest charges) to the banking cartel that sponsored their enterprise; they will try to sell their goods for *more* than what they are truly worth, the gauge of the “mark-up” being, again, basic interest. The entrepreneur-debtor, hard pressed to cover overhead (*Urzins*) thus pursues, as a rule, a three-pronged routine: cost-reduction, rent-seeking (i.e., create “scarcity” artificially), and consumerist hype (also known as “marketing”). In this fashion, interest breeds a never-ending spiral of preying of man upon man. Hence, the origin of labor exploitation: the case of the employer striving to dispense “working permits” (jobs) in a regime of exclusivity (because of which, applicants resignedly accept a dismal pay-scale); hence the sprawling of unsightly architecture (“cheap housing, cheap designs”) throughout the West, compared to which, personalized carpentry appears as yet another “luxury of the past”; hence the case of spacious

American downtown areas in which no free parking space is to be found (i.e., the City eliminates free-parking zones); and a million of other such instances, including the far more disquieting, and yet ominously predictable, temptation to put a price tag on human life or limbs—witness famous Debussy interpreter, pianist Arturo Benedetti Michelangeli’s insurance contract with Lloyd’s to safeguard his “capital equipment” —namely, *his hands*. All these actuarial calculations are inconceivable without interest. The notion of “present value” is unthinkable without it.⁸

Heresy...

Monetary dynamics is a narration of *power*, which, for anarchism is the original sin, the affliction plaguing our endeavor to live collectively in peace. This is power that elites exercised locally, by commanding the labor of others, via unearned (“rental”) income, which, *by law*, the banking networks channels to them; and power exercised internationally, that is, by the United States and its sleepwalking European satellites over the rest of the world: we recognize it as it spins that congeries of cross-country upheavals, world poverty, sclerotic growth, and otherwise inexplicable international agreements, laws and counter-laws, and ever more sophisticated financial instruments, matched by our confused neuroses about the overall health of the planet.

Subjected to the abuse of monetary imbalances, the economy reacts by displaying symptoms that typically follow arbitrary straining, such as inflationary and deflationary outbreaks. Both effects, in fact, operate concomitantly in our system.*

The years go by, and there appears to be no inherent force in our society capable of countering the growth of indebtedness. Indeed, since 1979, finance, with the full institutional backing of the world’s most powerful central banks,⁹ has lobbied vigorously to remove any such safeguard from the monetary make-up of our economies. Things are such today that no amount of protest, debt rescheduling and bankruptcy legislation is going to translate into some form of debt-exoneration for the working public as a whole.

* Simply stated, with inflation, the rate of increase, if any, of an individual’s income does not keep up with the appreciation of goods and services, which is itself, by definition, the effect of an unrestrained process of money-creation on the part of the central bank. Deflation, instead, is defined by a generalized decrease of the price level, which is exceeded by the drop in people’s incomes: this was a common scenario of pre-WWII capitalism. Like inflation—or everything else for that matter—deflation originates in the strictures of imperishable money, which is, indeed, *hoarded* whenever profits are no longer capable of covering overhead. Money is then withdrawn, and unemployment consequentially rises. Gesell provided a simple theoretical template to account for all such manifestations.

As long as economies handle traditional (i.e. imperishable) money, which is handed over in exchange for an exponentially-growing fee—interest—there can be no flattening out of the so-called business cycle; the two are intimately related. The wage-earners are simply not allotted sufficient purchasing power to satisfy the whole of production, and the employers, via the banks, have the means but certainly not the desire to cover the difference. The standard capitalist palliative, as an over-zealous Thomas Malthus suggested in the early XIXth, century is to fund a perennial debt by borrowing (the capitalists') money back into circulation, and/or injecting cash via deficit spending. The social outcome of such redistributive makeover, however, is the breeding of an army of unproductive consumers, such as warriors, lawyers, state officials, flunkies and court deacons (like Malthus himself)—all occupations created by the elite, paid for by the working hours of indentured credit-card holders, and further justified by the exigency to protect the profitability of business.¹⁰ It is no wonder that the ancient Hebrew remission of all debts, to be scheduled at regular seven-times-seven-year intervals—the jubilee—coincides with the end of a Kondratieff cycle, which spans approximately fifty years.

Inflation. Clearly, when the mass of the debt, public and private, has attained a dimension such that today roughly a fifth (possibly more)¹¹ of people's incomes is channeled toward the remittance of interest payments, which mature as a matter of arithmetic course upon the looming mass of the principal irrespectively of the aggregate dynamics of the economy, the obvious consequence is a *generalized increase in the price level*. On the one hand, producers discharge basic interest upon the selling price.¹² And, on the other, no matter how proficient central banks may be *in damming consumer markets from the virtual oceans of magnetic money they input into the payments grid in order to feed the debt*, such virtual ciphers will perforce spill over into the sphere of the ordinary consumables. Hence the erosion of our currencies' purchasing power: inflation can at best be contained, but never annulled so long as we depend upon an interest-driven credit machine.

...Trillions of dollars are required to maintain liquidity in financial markets generating slightly more than a hundred billion or sometimes (recently, in corporate stocks) negative amounts of funds [...].¹³

Deflation. Though ours is an inflationary environment, it is nonetheless systematically conditioned by deflationary pressure. Semi-stable as they may have lately been, we know 1) that *prices* are steadily creeping up (because of inflation), and 2) that, in real terms, they are *high*—in other words, *life is expensive*. And in this

* Full employment signifies greater output. Larger output, in turn, translates into low prices, and low prices generate low profits. Yet low profits cannot cover overhead. Therefore, in order to shield capitalization, the logic of interest dictates that production be restrained, prices jacked up, and workers laid off.

connection, we should not forget to mention that a “structural” rate of unemployment, as they say, of *at least* 10 percent seems to have established itself as the rule in the West (America included).¹⁴ This state of dearness coupled with quasi-immobile net job-creation stems, of course, from the inveterate business practice of restricting output in order to shore up prices, and thereby profits and market capitalization. As argued hitherto, the “merit” of the late Neo-Liberal regime is to have ensured the perpetuation of this tacit “tradition,” which Veblen denounced as “sabotage,”¹⁵ in a setting that has been somewhat unperturbed by violent oscillations in prices and employment.

So it happened that a mere symbol, a token, a virtual creature—money, which ought to be the most public of all goods—has been appropriated by a cartel of merchants through its aboriginal concentration of gold hoards. The subsequent development of banking could be seen as an impersonal drive to disembody the notion of time-resistance from its material support: in other words, to extract the “power of gold” from gold itself, as it were. Bankers have systematically endeavored to rid themselves of the encumbrances of precious metals: they do not seek the propinquity of the yellow metal for its own shimmering sake;¹⁶ it is rather *its virtue to command interest* that they strive to distill, and transfer to their books, checks and debit cards.

The magnetic impulses, which the bank sells its customers by mortgaging their belongings and labor, and whose repayment is expected under penalty of pecuniary sanction, court injunction, or apprehension by the bailiff, are still extensions of basic interest. Money should indeed be “electronic,” but not “sold” —today it is both.

Rudolf Steiner

The word heresy comes from the Greek Αἵρεσις —that is, “the faculty to choose.” Rudolf Steiner—a heretic *sui generis*—claimed that freedom is truly grasped when the individual gains knowledge through an act of the will: we seize truth because we wish it; in willing to possess a verity, we become unshackled.¹⁷

One such truth, to Steiner, was, indeed, the begging necessity of instituting perishable money.¹⁸ It was intriguing happenstance that this revolutionary notion was simultaneously and independently put forth by the leaders of two different currents of Germany’s communalist stream.

In Steiner’s view, money is an element, like water one may say, that undergoes transformations. It exists in three qualitatively different forms: as purchase, loan and gift money. Each and severally, these types of money reflect the economic process at different phases, and perform distinct offices.¹⁹

- 1) *Purchase* money is money as we know it, and under which we, erroneously according to Steiner, subsume all forms of pecuniary media. It is money with instant turnover. It is issued against goods that await immediate consumption.
- 2) The moment a *surplus* is formed within a community, so that a bundle of goods (food and materials), accompanied by their corresponding tokens (purchase money) become available for “transformation,” purchase money turns into *loan* money: the farmers entrust a craftsman with their “savings.” This money will now accompany the saved resources toward their transformation into something qualitatively different: an *investment*.
- 3) Thanks to investment, the surpluses accumulated will be such that a growing portion thereof, which exceeds the needs of the savers, *will be given away*. This juncture is of fundamental importance: a particular money-bill that had started its investment adventure long ago, and which now corresponds to some item of the surplus pool not reinvested in the cycle (because of abundance or rapid obsolescence), is most likely an “old note”—with, say, about a year to “live” before expiration; it is precisely this sort of money that will afford the support of the *gift economy*.

When the *gift economy*—that sector of society consisting of teachers, sculptors, priests, doctors, etc. —consumes its share, the money perishes, and the *associations* in charge of the donations will bring about a process of so-called “rejuvenation” —that is, they “burn” the dying note and issue new money in conjunction with those economic interests at the *origin* of the productive cycle, namely farming (land), followed by industry and craft (tools). Society in Steiner’s vision should consist of a harmonious interplay of three independent, yet coherently entwined, vital systems: laws and rights, economics, and the arts and sciences —his so-called Threefold Commonwealth. Free associations of consumers, traders and producers iron out contrasts and redress imbalances amongst themselves with no resort to litigation. The sphere of the rights, echoing the Platonic molding of jurisprudence in the City State, would define the tenor of a conduct of business that provokes no affront to the dignity of the worker. Finally, donation should be free, but one may presume that the process could be made more expeditious with a little help from the laws (liturgies, and mandatory alms). Eventually, the (dying) money is consigned to foundations that decide, under no duress, the destination of the gift.

In the light of everything that has been appraised so far, how can the joint communalist vision of Steiner and Gesell provide the revolutionary means with which to extinguish the toll imposed by eternal money and its associated ills?

As hinted above, Gesell advanced the idea of “free,” that is, perishable money (*Freigeld*). Free-money comes essentially in two variants: either as stamp scrip (*Schwundgeld* or *Schrumpfgeld*, “depreciative,” perishable certificates), or time-sensitive vouchers (*Ablaufgeld*, expiring-money). Gesell seemed indifferent between the two options, though he confined his discussion to the former, whereas Rudolf

Steiner favored the latter variant. *Stamp scrip* takes the form of a paper certificate that would keep its face value so long as the users would affix a stamp (a so-called demurrage fee)²⁰ upon it periodically –say, every week, or month. The device is clever, as it is designed to effect two critical and interrelated objectives at once. On the one hand, *it prevents the hoarding of money*, which is the chief mechanism responsible for stagnation and unemployment (i.e., deflation). Notes would only be accepted so long as they would bear the weekly (or monthly) stamp—bills only partially “stamped” would be accepted at a discount; the holder would naturally bear the correspondent loss. On the other hand, this periodical stamping of the note, as it changes hands over the course of a year, functions as a tax levied on the money itself—it is tantamount to a *negative interest* charged on the medium of payment. The economic significance of this expedient is fundamental: this special tax, which, according to Gesell, should have cumulatively amounted to a deduction in the range of 5-12 percent per annum, represents the *average rate of depreciation* of all the goods traded in the economy during the given cycle. Thus, Gesell reasoned, money-tokens are made to mimic, to reflect the life-cycle of the merchandise which they represent and accompany in the course of multitudinous transactions. Once one of such bills is fully stamped, it is expended one last time, and “dies,” the fully paid 5 percent charge indicating that this one note has fulfilled its circulatory obligations, so to speak, and signaled at the terminal point that our physical stock is being continuously used –as it should, for such are the economic ways of nature. Naturally, a dead bill is replaced by a new one.

Equally effective for Gesell was *Ablaufgeld*, mere paper-certificates bearing an expiration date. The difference with stamp scrip lay mostly in the administrative handling of the money. One could say that of the two types of Free-money, dated bills are by nature more anarchistic, in that they may function without collection agencies selling stamps on behalf of what would be, in fact, a (communally or otherwise) centralized Financial Ministry (or a National Currency Office, as Gesell envisioned it).²¹ With dated certificates, as it now indeed happens in several German districts (see below), merchants may double as autonomous minting bureaus, and issue such paper to the extent of, say, one percent of their stock, with the obvious and perennial objective to energize exchange (sales) and elude to a certain extent banking fees. In this case, the negative 5 percent interest charge, which may be spread across a wide swathe or spenders with stamp scrip, is sustained almost exclusively by the issuing-businesses themselves as they collect the expiring certificates and replace them with new ones: they call it a “usage fee” (it is the self-same demurrage device “incorporated” into the paper), which is from the retailers’ standpoint well worth paying in exchange for guaranteed and steady sales.

Money that is not advanced in exchange for interest generates *no debt*. Therefore, there will be no compulsion to roll over debts and command *inflationary* issuances of cash to support the interest payments that emanate from them. On the

other hand, the built-in no-hoarding provision, by forcing circulation, staves off *deflationary* counter-forces and ends up freeing the full productive potential of the community. As a result of an orderly and industrious surge of activity, stocks of all goods will be so increased that the *rate* of return on investment will be gradually *driven to zero*. Which is not to say that individuals may not become prosperous with free-money; quite the opposite, in fact: the novelty lies in the realization that, unencumbered by the obligation to remit interest, developers, for instance, would no longer be impelled to curb the expansion of housing in order to extort high prices from the public, with which to cover overhead (interest charges). More houses, more things would thus be produced, and incomes and wealth for the community as a whole would be augmented as a consequence.

Unlike Gesell, whose activist impatience compelled him to think still in terms of a centralized minting bureau, the no less reform-anxious Steiner kept his anarchist cool, so to speak, by focusing rather on the articulated cooperation of a fabric of *associations*. In his view, these bodies would coordinate policy, iron out inefficiencies, and monitor attentively the itinerary of money: from its natural source, agriculture, to its terminus, the arts & sciences, by way of manufacturing. In this sense, each regional minting office would have to be a tri-articulated institution structured according to the “ages of money,” in which, in the best classical tradition, the preeminent role would be reserved for the councilors of the spiritual sphere—as in the temple of Athena, where the priests would mint the owl on the coins of the city.

Translating the concept of time-sensitive money into the binary idiom of modern-day electronic circuits presents no difficulty. With proper legal dispositions, banks could be made to implement the reform at once. The checking account, upon which individuals will draw with magnetic debit cards, would then become the receptacle of free-money. An average depreciation levy, which would be calculated by a bureau of statistics by evaluating the ratio of goods to services and that of durables to perishables, could be accordingly imposed on it, daily, weekly, or even in real time.* Whatever is not spent on ordinary transactions may be deposited in a savings account. How is one to save with dying money? Simple. Once the savings are entrusted to the banks, it becomes the bankers’ responsibility to consign these funds to capable entrepreneurs, *who have thus the task of fighting depreciation in the customers’ stead*. In this sense, a zero-interest rate still represents a viable proposition for the savers, who are thereby guaranteed: 1) a profusion of investment thanks to the

* This provision need not be regressive. Relatively less affluent citizens, who hold by definition a proportionately greater portion of their wealth in liquid assets, may be compensated for the levy in various forms: by exempting deposits up to a certain dollar limit, or through social dividends and other communal subsidies.

no-hoarding condition; and 2) the security of seeing the face value of their nest egg preserved through time.

The Trials of Regional Currencies

Nowadays, most, if not all, regional schemes implemented in Germany and European surroundings have been direct filiations of Steiner's and Gesell's original intuitions.

Organizations to diffuse time-dated money were set up in Germany as early as 1919, in concomitance with Gesell's personal drive to see this reform through. But it was not until 1931 (one year after Gesell had died), in times of acute crisis, that such organizations aroused general notice. Chronologically, the first successful experiment with Gesellian stamp scrip was attempted at this time by a mine owner, Herr Hebecker, in the Bavarian coal town of Schwanenkirchen. For over two years the mine had been closed and "the village had barely existed by means of the dole." Hebecker, who had previously heard of the Gesellian associations, resolved to apply the concept. Shortly thereafter the results were reported to be "miraculous," so much so that the town's revival made world headlines. The reasons why the solution worked instantly were essentially two: first, the size of the community, which counted a mere 500 persons; and, second, the self-contained nature of such a community: Schwanenkirchen was an economic microcosm, orbiting around its coal mine. With perfect economic logic, as seen from Steiner's angle, it was the individual responsible for operations at the "base"—earth's powers of sustenance, i.e., the mine—who convinced retailers to accept the scrip with which the miners were going to be paid.^{*} Retailers, in turn, persuaded wholesalers, and the local wholesalers managed to pass the scrip across regional boundaries. And so business was revived rapidly throughout the region as it pulled itself along a new chain of solidarity. Inevitably, some notes swam all the way up to the regional offices of the Reichsbank. The success was so swift and threatening that the Reich had to forbid stamp scrip by means of an emergency law, claiming that it represented an illegal usurpation of a government prerogative.²² One year after Schwanenkirchen, the mayor of Wörgl, introduced Gesellian money into this Austrian township, itself palsied by an unemployment rate of nearly 50 percent. As communal employees, led by the mayor, agreed to receive half their salaries paid in scrip, while emergency workers took 100 percent in that form, economic activity flourished again. Not only were past obligations fulfilled by means of the emergency money, but significant public projects were carried out into the bargain.²³

^{*} In other words, Hebecker acted in the capacity of emergency mint.

The scrip functioned and it couldn't have been otherwise. These were intelligent provisions: demurrage fee (the stamp tax); a "conversion" fee greater than the monthly money-tax (as was the case in Wörgl) to discourage the people's early and precipitate exchange of stamp scrip back into "official" schillings; patronage (at least one bank and several businesses sponsoring the proposal); guaranteed reflux (acceptance of the scrip for tax payments); and local commitment (a local note could only be spent, at least initially, "locally"). Then reformers could dream on and envision their scrip traveling to a neighboring borough, and therefrom to another, *ad libitum*. Until, the banking network could be altogether bypassed, as a parallel web of mutual credit and partnership would have been systematically woven by the arachnids of communal irredentism.

Given the seventy-year hiatus that separates these original experiments from the late surge of regional initiatives, the chronicles of Schwanenkirchen and Wörgl have risen to the status of mythical antecedents in the general patrimony of communal reform. Owing to these roots, it is no accident that today Germany is at the forefront of the reformist impetus. According to a recent survey, there are nearly thirty different regional currency schemes in Germany,²⁴ and several more are in the works (roughly fifty other projects). Most notable amongst these so-called "complementary currencies" are Magdeburg's Urstromtaler and the Chiemgauer,²⁵ both of which have received media exposure, as well as Düsseldorf's Rheingold and the Freie Deutsch Mark (FDM) of Frankfurt. All these certificates, with the exception of the Chiemgauer, which is a re-edition of pure Gesellian stamp scrip, are time-dated vouchers.²⁶ Jost Reinert's Rheingold exchange-ring, as an add-on feature, promotes local artists by reproducing their works on the notes. The money tax charged on these currencies varies between 3 and 8 percent, 5 percent being the norm. When allowed, an additional fee is added for redemption in euros. The exchange rate with the euro is set by some issuers at 1:1, and by others, keenly fearful of central banking's inflationary proclivity, at 2 euros for 1 "regio."²⁷ The Chiemgauer, for instance, is the brainchild of a former teacher of a Steiner-Waldorf school; this particular currency is presently accepted in 550 shops and relies on a minting network of 40 offices.

These are promising beginnings. The overall volume of business moved by complementary currencies is still very small, however, and not all such schemes have been blessed with start-up success—Giessen's Justus, for example, recently folded. The obstacles on the path to diffuse implementation are several: first and foremost is the rival power of the incumbent banking system, confidently reliant as it is on a vast, capillary network of payments and commercial links, which has been implanted, developed and laid out with dedication and experience for the past several centuries. Second is the globalization of supply, which has progressively deprived communal nuclei of legal and economic clout, and thereby transformed retailing into the highly centralized, hub-and-spokes format of the warehouse-style supermarkets. Finally, the exclusivism with which certain of these experiments were born has confined their

currencies to being an upper-middle-class luxury, incapable by nature of overstepping the restricted boundaries of privilege.

Although these are daunting hurdles, the damages perpetrated by the prevailing economic establishment have been hitherto deemed sufficiently profound as to elicit regional initiatives all over the world. Activists try to monitor these developments as best as they can, and so far they have reckoned that approximately 165 full-fledged local exchange systems have been launched in 28 countries.²⁸ Interesting happenings have also been afoot on the American continent.²⁹

Fully-funded currencies like the Toronto Dollars (the plan was initiated in 1998), for instance, are backed by Canadian bank-money to the extent of a hundred percent;³⁰ they feature a ten percent discount fee for “redemption” (i.e., conversion into legal tender),* have a course of two years, and are redeemed nine times out of ten—the unredeemed ten percent, along with the cash retained for earlier redemption through discount is devoted to charitable endowments: namely, gift money.

What one observes in this case is a mimicking of the “perishable-money” model. Against the background of traditional monetary rule, certain local constituencies appear to have been granted the liberty to reclaim from commercial banking slivers of the economic landscape. Presumably, corporate banking interests are willing to brook such concessions if the overall business profitability in a semi-depressed enclave is such that the option of 1) loaning it a large sum for, say, the backing of fully-funded scrip, and that of 2) loaning it an inferior amount for customary business (earning proportionately more interest through higher turnover), are equally lucrative. In this sense, the circulation of fully-backed scrip like the Toronto Dollar, even if it carries the Gesellian demurrage device amounts to no more than a partial victory of the communal interests, for the banking cartel can bring a rapid end to the scheme, should it resolve to do so on a whim, by recalling the backing issue (of imperishable dollars).

Furthermore, examples of “true community currencies” are the various systems of barter, swap and mutual credit attempted in the past decades, including Ithaca HOURS, LETS (Local Exchange and Trading System), and THANKYOUS.³¹ Such media have functioned with varying degrees of success. Since 1991, *Hour Town*, a local tabloid in Ithaca, NY, has issued scrip to businesses that bought advertising space in cash; advertisers would publicize their willingness to transact in scrip, and receive a participatory (flat) premium in Ithaca HOURS for goodwill—this scheme is thus somewhat of a hybrid, for the scrip is loosely covered. One HOUR is symbolically equivalent to an hour’s work, that is, circa ten official U.S. dollars. Following a brisk resumption of activity, the arrangement turned into a full-bodied outfit, inclusive of non-profit status, a board of directors, and facilities for the allocation of loans and grants. The Ithaca scrip affords no stipulation for demurrage (depreciation charge for

* The option is available only to businesses

perishability), however, and there appears to be no methodical equilibration between issuance and reciprocity: it is not the businesses, or associations thereof, that print the certificates, but the newspaper, which, therefore, acts mostly as a bureau of minting and printing, so to speak, and qualifies as an issuer proper only when it accepts the scrip in payment for advertising space.³²

The regional swap network of the LETS has had mixed results, the chief problem being lack of business involvement. The individual is the issuer of LETS, and mutual cooperation amongst participants is relied upon to redress chronic imbalances, whereas a THANKYOU is a loosely quantified obligation—an acknowledgment of receipt—to reciprocate services rendered and goods acquired at a discount on a members-only sub-loop of the world wide web, hosted in California, called *Friendly Favors*, launched in 1999. This virtual league appears to be an etherealization of the gift economy: above a certain amount of THANKYOUS, a 1% demurrage charge is deducted from monthly balances, and a 10% “tithing” of all THANKYOUS is melted into non-profit endowments—a gift within the gift.

Indeed, with our mind’s eye, we find ourselves surveying the whole spectrum of monetary possibilities: from an early story of time-sensitive bills issued by a Mr. Hebecker in conjunction with coal down to the last stage of an affluent region’s bazaar of requital, California’s *Friendly Favors*. From free-money to gift money, via savings by way of loan money at zero percent interest: Gesell and Steiner in one. And the people seem to know already, intuitively, how it all works; what free-money therefore needs is the proper humus—a Threefold Social Commonwealth will do, the rest is child’s play.

...And Surrender

On at least four notable occasions in the last nine years, spokespersons of the investing interests have come out in the open to tackle the notion of dying money. Between 1999 and 2003, indeed, America’s and Britain’s central banks sponsored research papers in which—wonder of all wonders—not only was Gesell mentioned by name, but his “carry tax” on money was canvassed as a viable remedial tool for overcoming the macroeconomic difficulties of the day. This was rather jolting: imagine Cardinal Bellarmino calling on Galileo for an astrological reading...Utterly galvanized, certain factions within Germany’s Gesellian tribe thought they were seeing at last the hand of banking outstretched toward them, offering collaboration.

But appearances were deceptive, alas. Sure enough, at the turn of the third millennium, central banks were worried, as we saw earlier, by the low level of interest rates that had settled after the dotcom tumble. The rates were so low, in fact, that, shorn of inflation, they were approximately equal to zero. It so came to pass that

monetary policy, as the authorities lamented, was stuck in the “liquidity trap” of the “zero-interest-bound”: in other words, the system found itself powerless to revive aggregate demand by means of fiscal expansion—i.e. by selling Treasury bonds, whose rock-bottom yields offered, in fact, no incentive to investors: rates were such that it made virtually no difference whether one held wealth in cash or T-bills. This was Gesell’s classic deflationary scenario, in which banks, replete with cash, forbear from investing it for lack of profitable opportunity—which is to say, that so long as money is not guaranteed a real remuneration of at least 4 per cent or so (*Urzins*, basic interest), it withdraws in the virtual recesses of the network in wait for brisker times. Meanwhile, folk ain’t workin’.

At the time, a few publicists recommended that central banks go on printing money freely and cause thereby a *big inflation*. Inflation, by eroding the purchasing power of the hoarded money, would hopefully flush its owners from the brush of inactivity, forcing them to dis-hoard the cash and spend it.³³ Clearly, what was being groped for in this case was a *negative rate of interest*—precisely Gesell’s tax, which would yet be induced underhandedly, as it were, by causing the rate of inflation to exceed the going rate of interest. The hoarding masses would thus find themselves coerced to “take refuge” into spending the dollars they has so carefully treasured theretofore. Yet, central banks, which by nature abhor generalized inflation, can never approve of so entropic a suggestion. All the more so—and this was the crux of the issue—as an accelerated injection of liquidity into the world markets might have unnerved domestic, and especially *foreign* investors, and prompted them to unload billions’ worth of U.S. Treasury bills, with the well-known and parlous consequences that the United States had sworn to itself since 1979 never to witness again.

The opening shot was the Bank of England’s, which in 1999 preconized the imposition of a negative tax on currency, expecting thereafter that the banks themselves would apply it on deposits.³⁴ The following year a paper of the Richmond branch of the Federal Reserve called for the same option, *in conjunction with aggressive purchases on the part of the central bank of long-term Treasuries*, whose higher rates still offered some room for maneuver (i.e., being higher than zero, they could still fall).³⁵ In light of these policies, it was hoped that the private sector would “adjust”: lower long-term yields would be counted on to spur the public’s inclination to dis-save and consume, while higher bond prices, on the other hand, would generate capital gains, which could, too, stimulate the investors’ consumption. By 2003, when the Federal Reserve Bank of Dallas addressed once more the issue of the zero-bound, there seemed, however, to be no longer any fancy of toying with the Gesellian remedy, which was dismissed as “bold but impractical”: the Fed had finally deliberated that no anti-deflationary cure other than the policy of open market operations involving long-term debt would be contemplated for the purpose.³⁶

In the end, of course, nothing came of this strange brainstorming interlude in the Gesellian key. But what had been the meaning of it? And had central banking *really* been courting heresy?

Not quite. The reason for envisaging such a radical solution at that particular time hinged, as always, on America's capital imperative to stand as the world's clearing union and unchallenged financial market (see Part 1 of this Essay, Vol. 171:1): the power to attract capital to Wall Street is, as we've argued, the *sine qua non* for maintaining such a position of world command. Seeing the post-dotcom economy bogged down by zero-interest rates, and a dollar that was not weak, yet not strong enough to do anything about it, a segment of central bank analysts must have been pressured to come up with some sort of clever policy twist, and ended up by unearthing pell-mell Gesell's heterodox medicament.

So, clearly, by means of this "bold" device, the hypothetical plan was to attract to the financial and physical markets of the United States liquidity that had, for the time being, vanished "underground." In this connection, the Bank of England speculated, most interestingly, that a carry tax on U.S. dollars, 70 percent of which are held abroad, would also bring in significant revenue from the chests of foreign investors and central banks ("external seignorage"), as well as from the *criminal economy*—itself invoicing most of its transactions in greenbacks.³⁷

Indeed, the overall turnover of organized crime is estimated to be worth more than of 2 trillion dollars per annum, over 900 billions of which claimed by narcotics alone;³⁸ and this is not to mention arms and global tax evasion (elusion of the gift), both being, with insignificant exceptions, cash trades of extraordinary magnitude. For instance, most U.S. \$100 bills are shipped in bales by the Fed across the world to Russia. As a rule, the central bank pays the U.S. Treasury four cents per manufactured bill and resells it at face value: when queried by the FBI about patterns of money laundering, the Fed is generally uncooperative.³⁹

The banking grid is not in the dark as far as these flows are concerned, quite the opposite. Tax heavens operate as the invisible nodes of the network; they are the cash vaults of the black economy, forming the switchboard of a vast interface plugging the "clean" West to the "dirty" South by way of intoxicants, fiscal delinquency, weapons, and slavery.

The banking network does not yet appear to want "free-money": lately, it had been only claiming its cash back. Unsurprisingly, talk of zero-bound quicksand and stamp scrip has not been heard of in banking circles ever since the Dallas paper—and for good reason, considering that in 2003, as the housing bubble had been rapidly inflating, foreign monies had come pouring in once again.

To dispel any doubts as to banking's instinctive hostility to Gesellian economics, one need only consider the latest installment of this official brush between perishability and traditional bank-money in the form of a 50-page report on Germany's regional currencies commissioned in 2006 from a local academic by

Germany's central bank, the Bundesbank. This is an interesting document, not so much for its contents as for its organization, which is taken up for the most part with entirely futile mathematical toy-models pretending to "prove" the wrongness of the concept underlying regional currencies. Thus, after having cooked up terrifying estimates of the welfare loss putatively entailed by a wider diffusion of regional currencies, the author concludes his report with a hopeful note remarking that we need not yet worry, for this phenomenon remains "negligibly small." More than anything, this very document, with its virtual absence of institutional argumentation, and the somewhat supercilious tone of the exposition—which is the natural complement to the critique's inconsequence, is the symptom of a general sense of unease on the part of the banking community in view of what it perceives as encroachment.⁴⁰

The public's apprehension of all things monetary is today no less than yesteryear, a shambles. Most individuals, who handle money daily as a matter of course, do not know, on the other hand, why they pay interest, where interest comes from, how money is created, what its relationship is to gold, or, say, what a central bank essentially is and does.

The poor generally don't know [who the Governor of the Fed is] while the middle class doesn't understand him. Too many Americans don't have a clue as to what he does, an ignorance that the Federal Reserve [has] always preferred, even cultivated, and will likely continue to prefer and cultivate.⁴¹

The desire on the part of its chief managers to make money an arcanum has logically elicited the need for a ponderous propagandistic apparatus, whose "informative/educational" duties have been shared more or less equally by the press and academia. As known, the throughput of "economic commentary" issuing from both organs for the past fifty years has been positively overwhelming. What this flooding of information has accomplished is to have obscured the monetary question further by bringing into higher relief pre-existing strands of an historical debate that has revolved around method rather than substance. It is the merit of Polanyi's classic analysis in *The Great Transformation* to have established that all great institutional clashes that have punctuated the development of capitalism have been primarily waged by the two leading factions of Liberalism itself—namely, "the so-called 'progressives' (or 'liberals') and 'the conservatives.'" Which is to say that the validity of the monetary establishment as such has never been, and is never to be questioned; what is allowed, instead, is to argue about how best to manage it. And in this sense—as bluntly exemplified by American politics—the choice appears mechanically confined to either the progressive, so-called "Keynesian" option of governmental (part-time) intrusion into the entrepreneurial field; or the conservative, "Republican"

preference for an unbridled plutocratic privatization of all assets and the concomitant relegation of the State to the role of a surplus-commissioning buffer. Of course, things in reality have never been so dichotomic, for the system has been wont to display at all times shifting arrangements that have been the endless and convoluted fruit of compromise between the two positions.

Money-wise, the ironies of our story are droll enough in that, no matter how eager professional economists have been either to slight or ridicule the notion of time-dated money, the latter had actually been taken seriously by the respective patron saints of the two schools of thought. The liberals' idol, J. M. Keynes (1883-1946) of Cambridge University, congenitally incapable of coming up with an original concept of his own—let alone a simple, powerful theory of interest—literally stole Gesell's. Though he clearly saw that he could profitably manipulate the heuristic value of the Gesellian insight, according to which business paralysis is caused by profits rates sinking below basic interest, Keynes appeared to have feared the radicalism of stamp scrip, which he discarded on grounds of impracticality, again.⁴² On the conservative corner of the Liberal sandlot, Irving Fisher (1867-1947) of Yale University was, instead, an enthusiastic advocate of Gesell's scrip as an emergency device, yet a detractor of his theory of interest: Fisher did not believe that the introduction of "free-money" could possibly lead to the abolition of interest.⁴³ Thus cloven, the Gesellian file has been laid to rest, years ago, at an awkward angle. And, certainly, it is also from these early, partial endorsements that have issued those odd programmatic papers from central banks on the "zero-interest-bound."

All of which factors, what with the late condemnation of the idea by the Bundesbank, make for a landscape that no interested citizen could not but find extraordinarily confusing. In the sphere of monetary belief, the faiths up for adoption just seem to be too many, and the disagreement reigning over and among them is complete. By way of conclusion, let us then briefly review the major creedal strains presently available on the "market of ideas" aside from the communal option:

1) In position of command we find the (central) bankers, who have had the option of waking up on either the Keynesian or the (hawkish) inflation-fighting side of their bed depending on the political exigency of the day. These wish essentially to perfect a system of managed, virtual fiat money, which is made to act as if it were gold, without being cumbered, however, by the physical and extractive constraints of the yellow metal. This is the financial appendage proper of today's power structure. And, as it is to be expected, nine out of ten words of all writings devoted to the money question are drafted in its defense.

Alan Greenspan has testified before Congress that "a central bank properly functioning will endeavor to, in many cases, replicate what a gold standard would itself generate."⁴⁴

The other strains are represented, properly speaking, by fringe movements:

2) Gnawing curmudgeonly at the peripheral branches of the banking keep, the depleted swarms of so-called *gold-bugs* offer a curious spectacle. Much as the monarchists of yore would self-righteously navigate the Republic's Conservative mainstream, yet without ever disowning the golden idols of days gone by, modern-day advocates of a Gold Standard pose as the Right's puritanical wing in monetary matters. In their "Libertarian" view, only a strict return to a system of money-issuance tied to a tangible stock of noble metal can cure fiat money of its inflationary dissipations. Especially since the presidency of Reagan, a closet bug himself,⁴⁵ and indubitably lifted by the infinite ambiguity of central banking's relationship to gold, the bullion aficionados have managed to retain a foothold in the arena. This they have achieved by occasionally producing sharp critiques of current monetary policy,⁴⁶ and, most importantly, by turning diffuse popular resentment against banking's monopoly to their advantage with the not unsuccessful launch in the United States of a private barter system animated by a silver/gold coinage called the Liberty Dollar.⁴⁷ The endorsement of the latter scheme by presidential candidate Ron Paul,⁴⁸ whose effigy was thankfully engraved on a special edition of the network's coins,⁴⁹ not to mention the sensational raid by the FBI on the Indiana branch of the association and the concomitant sequestration of its gold and silver hoards in November 2007,⁵⁰ have doubtless strengthened the gold-bugs in their conviction. Though they have thus managed, like Germany's regional currencies, to make themselves a nuisance in the eyes of the banking interests, it remains nonetheless true that the gold-bugs' nostalgic recidivism represents a serious drag on the reformist élan. The problem, of course, is their institutional blindness, so to speak: it is as if they willfully ignore *that the system we have is a perfectly consequent evolution of a monetary standard originally harnessed to gold*, which they anachronistically fetishize. The quintessential illustration of this reality is indeed the tenure of ex-Fed Chairman Alan Greenspan, who, from being an ardent bullionist went on to become one of fiat money's most appreciated stewards: the transition was splendidly consistent, and yet the gold-bugs stubbornly refuse to see it thus, choosing instead, daftly, to condemn the likes of Greenspan as traitors.⁵¹

3) Not long ago, an even more marginal segment of the free-market diehards had been floating the notion of "free-banking," which implies the competitive issuance of (imperishable) dollars by rival business concerns. This is the mad dream of wanting to see a flurry of "corporate mints" —say, General Electric's, Citigroup's, Coca-Cola's, along with the national government's—all of them competing for the public's patronage of their "proprietary dollars." Here we witness yet another variation of this school's imaginary crusade against the bugaboo of public administration for the sake of corporate supremacy, for which, intimately, they always perorate. This proposal, in light of its irrelevance, need not detain our

discussion much longer for we have already explained that: a) non-financial corporations *do* indeed spawn, when conditions allow it, financial subsidiaries; b) money is managed by a peculiar, *private* cartel, not a public one; and c) cutthroat competition resolves, with varying delay, into oligopolistic equilibration, which is what the world has. The status quo *is* a fair approximation of the status desired by free-marketeers, but again, fanatical Liberals, good monarchist Utopians that they are, will not suffer to speak of their archetype—the Free-Market—in other than asymptotic imagery: they have been given Eden on earth, but the true-believers still believe ‘tis much too regulated.⁵²

A final note on the current slump. With the popping of the latest bubble—that of the subprime mortgage loans in mid-September 2008 (see part 1 of this article)—we have now been breathing an air of deep crisis for over a year. While the optimists pray for the next boom—one likely to be spurred by the new faith in “cleantech”⁵³—businesses and individuals in the USA, for instance, have yet again formed or revived networks to print their own money. And so we hear of “Detroit Cheers,” North Carolina’s “Plenty,” or Western Massachusetts’ “BerkShares”: anew, businesses, like improvised minting offices, are printing locally-denominated bills, which they hand out to customers at a discount of 5 percent to spend within a pool of affiliated stores.⁵⁴ Concomitantly, amidst calls for “abolishing the currency,” the academic stewards of the banking system have predictably resurfaced to conjure the Gesellian heresy of “negative interest rates.”⁵⁵ E.g., a Harvard economics professor and advisor to former President George W. Bush pleaded in the spring of ’09 for the introduction of a semi-jocose spin on the Gesellian device...In truth, it is always demanding not to witness with exhilarated fascination these orthodox custodians of the capitalist order invoke anarchist wisdom each time their house’s on fire:

What is the best way for an economy to escape a recession? [...] Lower interest rates encourage households and businesses to borrow and spend [...]. Why shouldn’t the Fed just keep cutting interest rates? Why not lower the target interest rate to, say, negative 3 percent? At that interest rate, you could borrow and spend \$100 and repay \$97 next year. This opportunity would surely generate more borrowing and aggregate demand. The problem with negative interest rates, however, is quickly apparent: nobody would lend on those terms [...]. Unless, that is, we figure out a way to make holding money less attractive [...]. Imagine [then] that the Fed were to announce that, a year from today, it would pick a digit from zero to 9 out of a hat. All currency with a serial number ending in that digit would no longer be legal tender. Suddenly, the expected return to holding currency would become negative 10 percent [...]. The idea of making money earn a negative return is not entirely new. In the late 19th century, the German economist Silvio Gesell argued for a tax on holding money.⁵⁶

Let us surrender then, surrender to the fact that the present-day system is not yet a truly benevolent, equitable one. And surrender to the realization that any eventual success that might be reaped by the promoters of regional, time-sensitive currencies will most likely come at the cost of great effort in view of the prejudices, the inertia and the massive resistance respectively opposed by our societies' academes, public habits and vested interests. Though, of course, it need not be so: we are certainly entitled to hope that circles within the government, banking and business that are looking ahead, will understand, and rally to the cause, thereby facilitating immensely what appears now a necessary, yet daunting endeavor.

This is only a wish. But, regardless of what "others" will do, all citizens animated by a true desire for peace, communalism and social justice should join forces to search for avenues that may render such an idea universal.

Endnotes

¹ Karl Polanyi, *The Great Transformation*. Boston: Beacon Press, 2001 [1944], pp. 26-27.

² Geminello Alvi, *Le Seduzioni economiche di Faust*. Milan: Adelphi, 1989, p. 214.

³ Silvio Gesell, *The Natural Economic Order*. San Antonio, Texas: Free Publishing Press, 1920.

⁴ For a detailed analysis of Gesellian economics see G. G. Preparata, and J.E. Elliott, "Free Economics: The Vision of Reformer Silvio Gesell," *International Journal of Social Economics* (Festschrift in honor of John O'Brien), Vol. 31, n. 10, September 2004.

⁵ On this peculiar and most important episode, see, for instance, Sebastian Haffner, *The Failure of a Revolution. Germany, 1918-1919*, Chicago: Banner Press, 1986 [1969]; Geminello Alvi, *Dell'estremo occidente. Il secolo Americano in europa. Storie economiche, 1916-1933*, Firenze: Marco Nardi Editore, 1993, pp. 119-22; and G. G. Preparata, *Conjuring Hitler. How Britain and America Made the Third Reich*, London: Pluto Press, 2005, pp. 42-57.

⁶ Barring foreign trade, if the banking system is the sole provider of money in the economy –as it is today; then, if it issues to business, say 100, with the expectation of being repaid 110 a year later, the extra 10 (of interest) can only be advanced to the "insolvent" economy by means of an additional loan. Thus is triggered the snowballing accumulation of (public and private) debt, exponentially magnified by the law of compound interest.

⁷ Thorstein Veblen *The Theory of the Leisure Class*. New York: Macmillan, 1899, pp. 188-211.

⁸ The mathematical equation for the present value (*PV*) of an asset is the following:

$$PV = v + v^2 + v^3 + \dots v^n = v \frac{1 - v^n}{1 - v}, \text{ where } v = \frac{1}{1+i}; \text{ } v \text{ is the discount factor and } i \text{ is the}$$

rate of interest. This is the standard formula for the present quantification of a piece of capital stock, from, say, a Xerox machine to a prostitute. It is by means of such actuarial formulations that a price may be assigned to everything, including human life. “Capital” thus expressed is a source of income—normalized to 1 (one unit) per period in the formula, which is expected to be earned from next year onward for the length of *n* periods. To “actualize” the value of this stream of forthcoming payments (i.e. express a cumulative value today, which can be traded or made the basis of a contract, as in a bank loan), one systematically divides each payment by the “discount factor,” *v*, with growing exponential powers for the installments sequentially scheduled in the future. Thus a dollar to be earned one year from now is discounted (at the bank, or in the money market generally speaking) by *v*, and is worth today, say, \$0.90, if *i* = 0.1 (ten per cent). At this rate of interest, 1 dollar to be paid 2 years from now is then actualized at \$0.82, and so on. For $n \rightarrow \infty$, the above formula collapses into the simple ratio $PV = 1/i$. This signifies that the present value of a guaranteed stream of one-dollar rents (or any multiple thereof) from here to eternity—a so-called perpetuity—is equal to the mortgage payment (normalized to 1 in the formula) divided by the rate of interest.

⁹ Warburton, *Debt & Delusion*, p. 43.

¹⁰ Thomas R. Malthus, *Principles of Political Economy*. New York: A. M. Kelley 1986 [1836], pp. 404 and ff.

¹¹ The Bureau of Economic Analysis reckons that monetary rents—categorized as “Personal Income receipts on assets”—amount to roughly 16 percent of national income. http://www.bea.gov/national/pdf/nipa_primer.pdf.

¹² Jacques Jaikaran, *Debt Virus: A Compelling Solution to the World's Debt Problems*. Glenbridge Publishing, 1995, pp. 79-95.

¹³ E. Ray Canterbery, *Alan Greenspan. The Oracle behind the Curtain*. London: World Scientific Press, 2006, p. 154.

¹⁴ America's officially trumpeted 5-6 percent unemployment rate deliberately underestimates the true extent of the country's joblessness. In truth, the Bureau of Labor Statistics calculates six different indices of unemployment (U-1, U-2, through U-6); the official figure is merely the middle gauge. The most comprehensive of such unemployment measurements—one that includes so-called “discouraged workers” and “part-timers looking for full-time employment”—yields a figure of 9 percent. See Kevin Phillips, Numbers Racket. “Why the Economy is Worse than We Know,” *Harper's Magazine*, v. 316, n. 1896, 1 May 2008. Now, if these aggregates were

further refined, that is, by adding to the unemployment pool categories such as "people who don't work, even though they should be able to," as well as an inmate population of two additional millions of able-bodied men—not to mention *the five additional million men and women presently on juridical probation*, the overall unemployment rate for the United States would jump at least to 15-16 percent. See <http://www.ncbi.nlm.nih.gov/pubmed/18341129>, <http://www.ojp.usdoj.gov/bjs/pandp.htm>.

¹⁵ Thorstein Veblen, *The Engineers and the Price System*. New York: B. W. Huebsch, 1921, Chapter I, pp. 1-26.

¹⁶ A number of "gold-bugs"—those market operators and publicists that advocate a resurrection of the Gold Standard as the only arrangement capable of purging the issuance process of any inflationary drift—contend that between 1995 and 1999, the West's premier central banks, led by the Fed, conspired to depress the price of gold. The Banks allegedly did so in order to sustain the rise of the dollar, which had been engineered with the Reverse-Plaza accord: thus, the gold-bugs argued, benefiting from the neutralization of the rival commodity (gold), the dollar was allowed to rise unobstructed. The creative means employed by this conniving pool of Banks was the so-called "gold carry-trade." According to this scheme, mining companies were lured by the central banks into borrowing the Banks' large stocks of gold at low rates—1 percent or so. These companies would then sell the borrowed gold stocks on the spot or forward markets, and invest the proceeds in 5-percent Treasuries, and profit from the spread. The ultimate effect of the operation was to flood the markets with the gold thus studiously and *temporarily* relinquished by the central banks with a view to depressing its price, and guaranteeing the dollar's controlled ascent. See Ferdinand Lips, *Gold Wars. The Battles against Sound Money as Seen from a Swiss Perspective*. New York: Foundation for the Advancement of Monetary Education, 2001, pp. 144-54. There appears to be merit in this thesis, as the practice on the part of the banking cartel to release gold whenever the dollar weakens seems fairly established: indeed, a few weeks after the dollar hit the record lows of mid-March 2008, the IMF announced its intention to sell 12.5 of its gold stocks, claiming that it needed to raise revenue in the face of a mounting budget deficit, see *The Economist*, "Selling the Family Gold," April 12th, 2008, p. 83.

¹⁷ Rudolf Steiner, *Intuitive Thinking as a Spiritual Path: A Philosophy of Freedom*. Hudson, NY: Anthroposophic Press 1995 [1900].

¹⁸ Rudolf Steiner, *World Economy: The Formation of a Science of World Economics*. London: Rudolf Steiner Press, 1977 [1922].

¹⁹ A discussion of Steiner's contribution to socio-economic thought may be found in G. G. Preparata, "Perishable Money in a Threefold Commonwealth: Rudolf Steiner and the Social Economics of an Anarchist Utopia," *Review of Radical Political Economics*, Vol. 38, n. 4, Fall 2006.

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- ²⁰ Demurrage in the commercial jargon is the cost of storage. Gesell introduces this notion to convey the image of goods which, immobilized by hoarding, are fated to rotting.
- ²¹ Gesell, Silvio, 1920. *Das Reichswährungsamt, Wirtschaftliche, politische und finanzielle Vorbereitungen für seine Errichtung*. Berlin: Freiland-Freigeldverlag.
- ²² Irving Fisher, *Stamp Scrip*. New York: Adelphi Company Publishers, 1933, pp. 17-21.
- ²³ Ibid, pp. 22-28.
- ²⁴ <http://www.regiogeld.de/regiogeld.html>.
- ²⁵ Tristana Moore, "Germans Take Pride in Local Money," *BBC Online*, 6 February 2007, <http://news.bbc.co.uk/2/hi/europe/6333063.stm>; "Germans get by without the Euro," *The Daily Telegraph*, 18 January 2007, <http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/01/18/cneuro18.xml>. Nils Klawitter, "Economic Cure or Fool's Gold?" *Spiegel Online International*, 6 March 2007, <http://www.spiegel.de/international/spiegel/0,1518,469875,00.html>.
- ²⁶ Information on all such regional currencies may be gleaned from their respective websites at: <http://urstromtaler.de/>; <http://www.rheingoldregio.de/index.php?menu=21&id=90>; and <http://www.chiemgauer.info>.
- ²⁷ See for instance http://www.freie-dm.de/faq_11.html for the rationale of an exchange rate of 2 euros to 1 regio.
- ²⁸ Stephen DeMeulenaere, "2007 Yearly Report of the Worldwide Database of Complementary Currency Systems," *International Journal of Community Currency Research*, Vol. 12 (2008) pp. 2-19.
- ²⁹ Inspired by Europe's emergency currencies, several American communities did experiment with them for a brief interval in the early thirties (see Fisher, *Stamp Scrip*), before being forced to desist altogether by Roosevelt's extraordinary banking legislation of March 1933.
- ³⁰ <http://torontodollar.com/>.
- ³¹ Thomas H. Greco, 2001. *Money: Understanding and Creating Alternatives to legal Tender*. White River Junction, VT: Chelsea Green Publishing Company. The websites for Thankyous, LETS and Ithaca Hours are respectively: <http://www.favors.org/FF/>, <http://www.transaction.net/money/lets/>, and <http://www.ithacahours.org/>.
- ³² Greco, op cit., p. 190.
- ³³ Paul Krugman –an "economist in good standing" by his own admission—conjured the following metaphor (of the baby-sitting co-op) to explicate the dynamics of deflation (reference is here made to the Japanese crisis): "During the winter, when it's cold and dark, couples don't want to go out much, but are quite willing to stay home and look after other people's children –thereby accumulating points they can use on

balmy summer evenings. If this seasonality isn't too pronounced, the co-op could still keep the supply and demand for baby-sitting in balance by charging low interest rates in the winter months, higher rates in the summer. But suppose that the seasonality is very strong indeed. Then, in the winter, even at a zero-interest rate, there will be more couples seeking opportunities to baby-sit than there are couples going out; which means that baby-sitting opportunities will be hard to find [...] and the co-op will slide into a recession even at a zero-interest rate [...]. The answer, as any economist should immediately realize, is to get the price right: to make it clear that points earned in the winter will be devalued if held until summer –say, to make five hours of baby-sitting credit earned in the winter *melt* into only four hours by summer. This will encourage people to use their baby-sitting hours *sooner*, and hence create more baby-sitting opportunities [...]. An economy which is in a liquidity trap needs *expected inflation* –that is, it needs to convince people that the yen they are tempted to hoard will buy less a month or a year from now than it does today” (Paul Krugman, *The Return of Depression Economics*. New York: W. W. Norton, 2000, pp. 73, 78). Decryption: when it's cold and dark, that is, when the rate of profit has sunk below Urzins, capital is not invested (people don't go out), but hoarded (couples stay indoors warding their own children). If, the rate of profit were slightly above Urzins (seasonality not too pronounced), banking could equate the demand and supply of capital (baby-sitting) by calibrating interest: higher during booms (summer fun), lower in dull times (winter). But if profitability is a shambles and markets appear to be saturated beyond recovery (pronounced seasonality), the economy (the co-op) is mired in the “trap.” Solution: compel savers to part with their hoards. How? Krugman suggests inflationary scare—that is, a pre-announced inflation tax that will make the hoarded money *melt*.

³⁴ Willem Buiter, and Nikolaos Panigirtzoglou, “Liquidity Traps: How to Avoid Them and How to Escape Them.” *NBER Working Paper Series*, 1999. <http://www.nber.org/papers/w7245>.

³⁵ Marvin Goodfriend, “Overcoming the Zero Bound on Interest Rate Policy,” *Working Paper of the Federal Reserve Bank of Richmond*, 2000, <http://www.rich.frb.org/pubs/wpapers/pdfs/wp00-3.pdf>.

³⁶ Evan F. Koenig, and John Dolmas, “Monetary Policy in a Zero-Interest-Rate Economy,” *Federal Reserve Bank of Dallas*, May 2003. <http://www.dallasfed.org/research/indepth/2003/id0304.pdf>.

³⁷ Buiter and Panigirtzoglou, “Liquidity Traps,” p. 44.

³⁸ Friedrich Schneider, “Money Laundering and Financial Means of Organized Crime: Some Preliminary Empirical Findings,” *Social Science Research Network*, May 2008. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1136149-. See also: http://www2.econ.uu.nl/users/unger/conference%20slides/Schneider%20-%20MoneyLaundering_October2007.ppt.

³⁹ Martin Mayer, *The Bankers. The Next Generation: The New Worlds of Money, Credit and Banking in an Electronic Age*. New York: Truman Talley, 1997, p. 77.

⁴⁰ Gerhard Rösl, "Regional Currencies in Germany—Local Competition for the Euro?" *Deutsche Bundesbank Eurosystem*, Discussion Paper, Series 1: Economic Studies, No. 43/2006.

http://www.bundesbank.de/download/volkswirtschaft/dkp/2006/200643dkp_en.pdf.

Interviewed by the press on the subject of regional currencies after the release of the Bundesbank report, its author—a political economist at Regensburg Technical College—introduced his answers with the typically disdainful contention that Gesellian schemes are the product of "social romanticism on the part of people who don't think in a structured way" (Klawitter, "Economic Cure or Fool's Gold?", p. 2). Disdain aside, such a contention augured well for it could have been read as an invitation to look into the report for a pragmatic exposition of finely structured economic thinking. Alack, what a disappointment. To begin, we shall briefly review four arguments that are made in the institutional, preliminary segment of the discussion. First, Rösl notes in postmodern fashion that, when it comes to cash, it is ultimately "misleading" to distinguish between exploiter (creditor, or money possessor) and exploited (debtor, worker), because as soon as the worker gets paid, he too becomes an exploiter—in that he forthwith invests his dollar at interest (pp. 9-10). Yes, we said it earlier: "Interest breeds a never-ending spiral of preying of man upon man." However, to conclude that "from the macroeconomic perspective, the exploitation collapses into a zero-sum game without net winners or losers" is disingenuous, to say the least. In fact, owing to the redistributive laws of the Liberal systems, median households—least of all American ones, *which on average save nothing*—have never been the chief recipients of the bulk of money rents (interest payments). It is the wealthy, by definition, who control that essential flux. No doubt, business (or banking) successful start-ups always issue from the competitive ability to corner a sufficient amount of cash, which is then counted on to consolidate the newly-acquired position of market power—think, for instance, of all those corporate manufacturers that have established their own financial subsidiary, and of Wal-Mart's failed bid in 2005 to carve a node for itself in the banking industry. Yet winners and losers are drawn, as ever, from the same social strata in a process, which, in the past generation has done precious little to redress class inequalities, yet much, on the other hand, to augment significantly the receipts of the richest citizens.

Second, the author asserts that "Gesell's theory totally ignores the real economic dimension of interest, which is reflected in the real compensation of the capital donors for their *restraint in consumption*" (p. 9, emphasis added). Now, anyone even cursorily acquainted with the ways of bank lending agrees that conventional mortgaging, especially the aggressive type practiced by credit institutes

these days, has never had anything to do with “restraint”—which, even by Neoclassical standards, is a hackneyed apologue so profoundly discredited, again, by abiding patterns of highly skewed wealth concentration, that nobody virtually uses it anymore. By definition, “capital donors” expand their income *with funds they have no immediate use for* via the activity of investment outfits—from banks to hedge funds, which customarily *leverage* their placement operations. For instance, it is not uncommon for banks to take full advantage of the deposits’ multiplier (i.e. loan out the whole \$99,000 with only \$1000 in the till, given a reserve ratio of 1 per cent)—and eventually scramble to cover their obligations by borrowing themselves the funds from the money markets (see, for example, Werner, *Princes of the Yen*, p. 45). Human ingeniousness, coupled with thrift—which is not necessarily born of continence (i.e., “restraint”)—is the source of growth, not of interest; interest, being a toll, presupposes growth and not vice versa. Gesell explained clearly how abundance triggered by the forced circulation of money naturally depresses the rate of interest, which is an index of *scarcity*.

Finally, a system based on regional currencies is accused in the report of fomenting an isolationist environment—an environment bound to impede “cross-regional trade, without which a region cannot go on developing” (p. 12). This is patently false. First of all, Gesell himself seriously contemplated in the NIO the nature and institutional requisites of an international associative body assigned to coordinate monetary policy amongst communities using perishable money. Moreover, and most importantly, the story of Schanwenkirchen, whose vouchers reached the district offices of the Reichsbank, as well the common-day experience of all traders, consumers and businesspeople presently using regional currencies categorically belie this contention. By itself, increased turnover, which these bills are designed to spur, is bound sooner or later to project the money outwardly in search of richer and more diverse provisioning. It remains nonetheless true that regional currencies are intended to strengthen the communal base—which is to be hailed as a salutary phenomenon; and upon that base, it is only natural that they should build the external relations that are indeed essential for prosperity.

The remainder of the report’s evaluation of the principles behind stamp scrip is entrusted to the conventionally fantastic mathematical artifices of utility-maximization. As known, professional economists believe that all economic actions may be construed “as if” they were the result of a hidden process governed by a secret algorithm lodged in some fold of our soul. This invisible calculator within us supposedly gathers information from the outside world and formalizes it as a problem—as a system of equations whose solution requires that our bodily pleasure, putatively tracked by an imaginary “utility” function, be highest at all times. Two examples will suffice. On pp. 19-23, the author resorts to a model of optimal control, whereby utility is maximized subject to a differential equation relating the variation

in per capita financial assets (=capital+money) to household income (positively) and aggregate consumption (negatively). Among the consumption items affecting wealth negatively figures the Gesellian “carry tax” on the money stock (σ). Because the first order maximization conditions yield a differential equation (equation 14.3, p. 21) for the co-state variable (λ) in which σ does not appear, the author confidently notes that “in the long-run, the optimal consumption plan is independent of the depreciation rate [of money].” Hence, he concludes, “the ongoing stimulation of aggregate demand by means of increasing the depreciation rate [of money], which the supporters of the [...] *Freigeld* theory hope for, [...] proves unsustainable” (p. 23). However, no economic interpretation whatsoever is offered to account for this mathematical canceling out of σ , and we further wonder how the claim of “unsustainability” may be held within a model that says nothing of the macroeconomic environment in which this putative utility-maximization takes place. Afterwards, the author posits an explicit function linking, exponentially, utility to the money stock and consumption. Maximizing it and manipulating it further, he derives an expression for “the consumption growth rate” needed to offset the “utility loss” entailed by the imposition of “carry tax” on money (p. 27). Thanks this other piece of formidable microeconomic analysis, we learn that the “economic welfare costs of a 1 percentage point increase in the depreciation rate of money” amount to 0.8 percent (using M1 data). Which is akin to saying that if some tax goes up by one dollar, one would hypothetically need to increment his expenditure by 80 cents in order to restore his wounded sense of optimal well-being, without regard moreover to what the tax achieves. On this basis, the author sentences that if one were to impose at once the 12 percent levy of the Chiemgauer on Germany’s money stock (M1), the average German citizen would suffer a “welfare loss” of 1600 euros per annum (p. 28)... Overall, that the Bundesbank would endorse the employ of such inane abstractions to tackle as concrete an economic reality as that of regional currencies is somewhat perplexing, though perfectly in line with the current practice of conventional “economic research.” If anything, this might bode well for an oncoming generation of properly institutionally-trained mathematicians who might one day formalize these phenomena in a *realistic* fashion and thereby pull us all out of the stone age of economic theorizing.

⁴¹ Canterbury, *Alan Greenspan*, p. x.

⁴² For an in-depth study of Keneyesian monetary economics and its plagiarism of Gesell’s theory of interest see G. G. Preparata, “On the Art of Innuendo: J. M. Keynes’s Plagiarism of Gesell’s Monetary Economics,” in *Research in Political Economy*, Vol. 20, 2002, pp. 217-54.

⁴³ Irving Fisher, *Stable Money. A History of the Movement*. New York: Adelphi Company publishers, 1934, p. 141.

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- ⁴⁴ Lawrence White, "Is the Gold Standard Still the Gold Standard among Monetary Systems," in *Cato Institute Briefing Papers*, n. 100, February 8, 2008. Greenspan's testimony is from 2001, <http://www.cato.org/pubs/bp/bp100.pdf>.
- ⁴⁵ Greider, *Secrets of the Temple*, pp. 379-80.
- ⁴⁶ Consult, for instance, <http://www.safehaven.com/> and <http://www.gold-eagle.com/>.
- ⁴⁷ <http://www.libertydollar.org/>.
- ⁴⁸ <http://www.house.gov/paul/congrec/congrec2008/cr021308h.htm>.
- ⁴⁹ <http://www.libertydollar.org/ld/ronpauldollar>.
- ⁵⁰ <http://video.aol.com/video-detail/fbi-raids-ron-paul-liberty-dollar-in-evansville-indiana-fox/2533005518>.
- ⁵¹ Lips, *Gold Wars*, pp. 144, 220.
- ⁵² Robert Gelfond, "Toward Free-Market Money." *Cato Journal*, Vol 21. No. 2, 2001.
- ⁵³ Jordan Robertson, "Where's the Next Boom? Maybe in 'Cleantech'," *Associated Press*, 6 October 2009.
- ⁵⁴ Marisol Bello, "Communities Print Their Own Currencies to Keep Cash Flowing," *USA Today*, 4 October 2009.
- ⁵⁵ Willem Buiter, "Negative Interest Rates: When Are They Coming to a Central Bank Near You?" *Financial Times*, 7 May 2009.
- ⁵⁶ N. Gregory Mankiw, "It May be Time for The Fed to Go Negative," *New York Times*, 24 April 2009.